

**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5**

IN THE MATTER OF:

**Duke Energy Indiana, LLC
Cayuga Generating Station
P. O. Box 188
Cayuga, Indiana 47928**

ATTENTION:

Plant Manager

Request to Provide Information Pursuant to the Clean Air Act

The U.S. Environmental Protection Agency is requiring Duke Energy Indiana, LLC (Duke) to submit certain information about its Cayuga Generating Station in Cayuga, Indiana. Appendix A provides the instructions needed to answer this information request, including instructions for electronic submissions. Appendix B specifies the information that you must submit. You must send this information to us within 30 calendar days after you receive this request.

We are issuing this information request under Section 114(a) of the Clean Air Act (the CAA), 42 U.S.C. § 7414(a). Section 114(a) authorizes the Administrator of EPA to require the submission of information. The Administrator has delegated this authority to the Director of the Air and Radiation Division, Region 5.

Duke owns and operates the Cayuga Generating Station near Cayuga, Indiana. We are requesting this information to determine whether your emission source is complying with the Indiana State Implementation Plan and the CAA.

Duke must send all required information to:

Attn: Compliance Tracker, AE-17J
Air Enforcement and Compliance Assurance Branch
U.S. Environmental Protection Agency
Region 5
77 W. Jackson Boulevard
Chicago, Illinois 60604

Duke must submit all required information under an authorized signature with the following certification:

I certify under penalty of law that I have examined and am familiar with the information in the enclosed documents, including all attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are, to the best of my knowledge and belief, true and complete. I am aware that there are significant penalties for knowingly submitting false statements and information, including the possibility of fines or imprisonment pursuant to Section 113(c)(2) of the Clean Air Act and 18 U.S.C. §§ 1001 and 1341.

As explained more fully in Appendix C, you may assert a claim of business confidentiality under 40 C.F.R. Part 2, Subpart B for any part of the information you submit to us. Information subject to a business confidentiality claim is available to the public only to the extent, and by means of the procedures, set forth at 40 C.F.R. Part 2, Subpart B. If you do not assert a business confidentiality claim when you submit the information, EPA may make this information available to the public without further notice. You should be aware, moreover, that pursuant to Section 114(c) of the CAA and 40 C.F.R. § 2.301(a) and (f), emissions data, standards and limitations are not entitled to confidential treatment and shall be made available to the public notwithstanding any assertion of a business confidentiality claim. Appendix C provides additional information regarding the meaning and scope of the term “emissions data.”

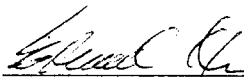
This information request is not subject to the Paperwork Reduction Act, 44 U.S.C. § 3501 *et seq.*, because it seeks collection of information from specific individuals or entities as part of an administrative action or investigation.

We may use any information submitted in response to this request in an administrative, civil or criminal action.

Failure to comply fully with this information request may subject Duke to an enforcement action under Section 113 of the CAA, 42 U.S.C. § 7413.

You should direct any questions about this information request to Ethan Chatfield at (312) 886-5112 or chatfield.ethan@epa.gov.

8/4/16
Date


Edward Nam
Acting Director
Air and Radiation Division

Appendix A

When providing the information requested in Appendix B, use the following instructions and definitions.

Instructions

1. Provide a separate narrative response to each question and subpart of a question set forth in Appendix B.
2. Precede each answer with the number of the question to which it corresponds and, at the end of each answer, identify the person(s) who provided information used or considered in responding to that question, as well as each person consulted in the preparation of that response.
3. Indicate on each document produced, or in some other reasonable manner, the number of the question to which it corresponds.
4. When a response is provided in the form of a number, specify the units of measure of the number in a precise manner.
5. Where information or documents necessary for a response are neither in your possession nor available to you, indicate in your response why the information or documents are not available or in your possession, and identify any source that either possesses or is likely to possess the documents or information.
6. If information not known or not available to you as of the date of submission later becomes known or available to you, you must supplement your response. Moreover, should you find at any time after the submission of your response that any portion of the submitted information is false or incorrect, you must notify EPA as soon as possible.

Electronic Submissions

To aid in our electronic recordkeeping efforts, we request that you provide all documents responsive to this information request in an electronic format according to paragraphs 1 through 6, below. These submissions are in lieu of hard copy.

1. Provide all responsive documents in Portable Document Format (PDF) or similar format, unless otherwise requested in specific questions. If the PDFs are scanned images, perform at least Optical Character Recognition (OCR) for "image over text" to allow the document to be searchable. Submitters providing secured PDFs should also provide unsecured versions for EPA use in repurposing text.
2. When specific questions request data in electronic spreadsheet form, provide the data and corresponding information in editable Excel or Lotus format, and not in image format. If Excel or Lotus formats are not available, then the format should allow for data to be used in calculations by a standard spreadsheet program such as Excel or Lotus.

3. Provide submission on physical media such as compact disk, flash drive or other similar item.
4. Provide a table of contents for each compact disk or flash drive containing electronic documents submitted in response to our request so that each document can be accurately identified in relation to your response to a specific question. *We recommend the use of electronic file folders organized by question number.* In addition, each compact disk or flash drive should be labeled appropriately (e.g., Company Name, Disk 1 of 4 for Information Request Response, Date of Response).
5. Documents claimed as confidential business information (CBI) must be submitted on separate disks/drives apart from the non-confidential information. This will facilitate appropriate records management and appropriate handling and protection of the CBI. Please follow the instructions in Appendix C for designating information as CBI.
6. Certify that the attached files have been scanned for viruses and indicate what program was used.

Definitions

All terms used in this information request have their ordinary meaning unless such terms are defined in the CAA, 42 U.S.C. §§ 7401 *et seq.*, the Indiana State Implementation Plan, or the administrative regulations promulgated pursuant to either of the foregoing.

1. The terms “document” and “documents” shall mean any object that records, stores, or presents information, and includes writings, memoranda, records, or information of any kind, formal or informal, whether wholly or partially handwritten or typed, whether in computer format, memory, or storage device, or in hardcopy, including any form or format of these. If in computer format or memory, each such document shall be provided in translation to a form useable and readable by EPA, with all necessary documentation and support. All documents in hard copy should also include attachments to or enclosures with any documents.
2. The term “related to” (or any form thereof) shall mean constituting, reflecting, representing, supporting, contradicting, referring to, stating, describing, recording, noting, embodying, containing, mentioning, studying, analyzing, discussing, evaluating or relevant to.

Appendix B

Information You Are Required to Submit to EPA

Provide the following information using the instructions and definitions provided in Appendix A. If possible, EPA requests that all information be provided in electronic, unlocked (.pdf or .xls) format.

1. For each coal-fired unit at the facility, provide a spreadsheet with the following:
 - a) the emission unit identification number;
 - b) the date or year commercial operation began;
 - c) any scheduled or planned unit retirement dates;
 - d) the original design and current maximum generating capacity (MWg/MWn);
 - e) the original design and current maximum heat input capacity (mmBtu/hr);
 - f) the type of particulate emissions control (manufacturer and design) in operation on the unit, date commenced operation, and design outlet emission rate and/or removal efficiency specification and guarantees;
 - g) the type of sulfur dioxide emissions control (manufacturer and design) in operation on the unit, date commenced operation, and design outlet emission rate and/or removal efficiency specification and guarantees;
 - h) the type of nitrogen oxides emissions control (manufacturer and design) in operation on the unit, date commenced operation, and design outlet emission rate and/or removal efficiency specification and guarantees;
 - i) the type of sulfuric acid emissions control (manufacturer and design) in operation on the unit, date commenced operation, and design outlet emission rate and/or removal efficiency specification and guarantees; and
 - j) a detailed description of any planned installation of new particulate, sulfur dioxide, nitrogen oxides, acid gas, sulfuric acid mist, mercury or other emission controls.
2. Provide the design and current SO₂ to SO₃ conversion rate of the SCRs at the Cayuga Station, and any documents that discuss the SO₂ to SO₃ conversion rate including but not limited to specifications supplied to SCR vendors with invitations to bid, contracts with the SCR vendor, and measurements of SO₂ to SO₃ conversion rate performed before or after the installation of the SCR.
3. Provide a copy of all documents that provide a reason, justification, or description of why the recently installed selective catalytic reduction (SCR) systems were not operated continuously in calendar year 2015 and beyond.
4. If either of the SCRs have been operated since installation, provide an Excel compatible (non-encrypted) spreadsheet that contains the following information since installation:
 - a) the maximum design ammonia flow rate of SCR;
 - b) the total daily heat input (mmbtu)
 - c) the average daily ammonia flow rate into the SCR; and

- d) the total daily SO₂ emissions (tons).
5. Provide any studies, analyses, and other documents that provide an explanation of how the SCRs installed at the Cayuga Station will be used for enhanced mercury oxidation and capture.
 6. Provide the information below on a monthly basis from January 1, 2005 to the date of this request, in electronic (Microsoft Excel compatible) format:
 - a) total gross and net generation (MW-hr);
 - b) average heat rate (BTU/KW-hr);
 - c) fuel usage (tons);
 - d) average fuel heat content (BTU/lb);
 - e) total hours under load;
 - f) percent sulfur of fuel combusted; and
 - g) peak hourly generation (MWg) achieved during each month.
 7. Provide a complete electronic (Microsoft Excel compatible) copy of all Generating Availability Data System (GADS) data (or equivalent if GADs data is not available) for the Cayuga Station from January 1, 1980 to the date of this request. Data should include all GADs event and performance reports/data.
 8. Provide a list of all capital projects of an amount greater than \$250,000 approved or completed at the Cayuga Station from January 1, 2005 to the date of this request. For each such capital project, identify the work performed, the date completed or projected to be completed, the project work order number and the dollar amount approved and expended.
 9. Provide the following information for each outage listed below:

Plant	Unit	Approximate Outage Date
Cayuga	1	January 2015 to May 2015
Cayuga	2	October 2014 to January 2015

- a) the exact out-of-service and in-service dates (month/day/year);
- b) the total cost of the outage and a list of all expenses related to the outage;
- c) all project authorization requests related to each outage with authorized expenditure, authorizing signatures, approval dates, and any associated attachments, addendums or supporting documentation;
- d) all work orders related to each outage, including work order approvals with authorizing signatures;
- e) all work order project completion reports related to each outage;
- f) any outage reports detailing all work completed during the time of the outage;
- g) all project justifications related to each outage (including any presentations made to management or Board, or outside approval organizations (e.g. public utilities commission));

- h) all documents relating to cost/benefit analyses for each outage;
 - i) all alternative options analyses related to the outage;
 - j) the estimated date(s) that components were replaced prior to each outage;
 - k) all correspondence with the State or regulatory agency regarding the potential applicability or exemption of any provision of the Clean Air Act;
 - l) copies of all emission calculations performed in conjunction with the outage, including calculations performed before the project was commenced and after the project was completed, as well as any determination(s) that no emission calculations were necessary;
 - m) all documents providing or discussing the prior frequency, duration or extent of downtime/derates related to the components being replaced during the outage;
 - n) copies of all documents describing whether the outage was associated with a life extension project, capacity increase, efficiency enhancement, or reliability improvement; and
 - o) all documents describing the purpose or goals of any components replaced during the outage.
10. Provide copies of all load capacity test data/test reports for Units 1 and 2 at the Cayuga Station from 2005 to the date of this request.
 11. Provide a complete final copy of all Integrated Resource Plans (IRPs) and updates submitted from January 1, 2014 to the date of this request.
 12. Provide copies of all Quarterly Excess Emission Reports and any supporting calculations from January 1, 2011, through the date of this request.
 13. Provide copies of the all stack tests for each coal-fired boilers for particulate matter (PM, PM₁₀, PM_{2.5}), sulfuric acid mist (H₂SO₄ or SO₃), acid gases, and mercury from January 1, 2005, to the date of this request.
 14. Provide an electronic (Microsoft Excel compatible, .xls) copy of all continuous opacity monitor system (COMS) data (6-minute averages) that exceeds 20 percent opacity requirement for each coal-fired boiler at the Cayuga Station from January 1, 2012 to the date of this request. COMS data should include percent opacity, date and time, a reason/action code with description, and any corrective actions taken for each 6-minute average opacity exceedance period. Any 20 percent opacity, 6-minute average that Duke believes is exempt should be noted or marked and a reason for any exemption provided with supporting data. Providing copies of the Quarterly Deviation and Compliance Monitoring/Opacity Exceedance Events Reports is not sufficient in responding to this request. Do not provide all COMS data during this period (i.e. too much data), but only the 6-minute average data that exceeds the 20 percent opacity in the applicable standard.
 15. Provide copies of all visible emission observations (including but not limited to EPA Method 9 readings or Method Alt-082 readings) since January 1, 2011 to the date of this request.

Appendix C

Confidential Business and Personal Privacy Information

Assertion Requirements

You may assert a business confidentiality claim covering any parts of the information requested in the attached Appendix B, as provided in 40 C.F.R. § 2.203(b).

Emission data provided under Section 114 of the CAA, 42 U.S.C. § 7414, is not entitled to confidential treatment under 40 C.F.R. Part 2.

“Emission data” means, with reference to any source of emissions of any substance into the air:

Information necessary to determine the identity, amount, frequency, concentration or other characteristics (to the extent related to air quality) of any emission which has been emitted by the source (or of any pollutant resulting from any emission by the source), or any combination of the foregoing;

Information necessary to determine the identity, amount, frequency, concentration or other characteristics (to the extent related to air quality) of the emissions which, under an applicable standard or limitation, the source was authorized to emit (including to the extent necessary for such purposes, a description of the manner and rate of operation of the source); and

A general description of the location and/or nature of the source to the extent necessary to identify the source and to distinguish it from other sources (including, to the extent necessary for such purposes, a description of the device, installation, or operation constituting the source).

40 C.F.R. § 2.301(a)(2)(i)(A), (B) and (C).

To make a confidentiality claim, submit the requested information and indicate that you are making a claim of confidentiality. Any document for which you make a claim of confidentiality should be marked by attaching a cover sheet stamped or typed with a caption or other suitable form of notice to indicate the intent to claim confidentiality. The stamped or typed caption or other suitable form of notice should employ language such as “trade secret” or “proprietary” or “company confidential” and indicate a date, if any, when the information should no longer be treated as confidential. Information covered by such a claim will be disclosed by EPA only to the extent permitted and by means of the procedures set forth at Section 114(c) of the CAA and 40 C.F.R. Part 2. Allegedly confidential portions of otherwise non-confidential documents should be clearly identified. EPA will construe the failure to furnish a confidentiality claim with your response to the information request as a waiver of that claim, and the information may be made available to the public without further notice to you.

Determining Whether the Information Is Entitled to Confidential Treatment

All confidentiality claims are subject to EPA verification and must be made in accordance with 40 C.F.R. § 2.208, which provides in part that you must satisfactorily show: that you have taken reasonable measures to protect the confidentiality of the information and that you intend to continue to do so, that the information is not and has not been reasonably obtainable by legitimate means without your consent and that disclosure of the information is likely to cause substantial harm to your business's competitive position.

Pursuant to 40 C.F.R. Part 2, Subpart B, EPA may at any time send you a letter asking that you support your confidential business information (CBI) claim. If you receive such a letter, you must respond within the number of days specified by EPA. Failure to submit your comments within that time would be regarded as a waiver of your confidentiality claim or claims, and EPA may release the information. If you receive such a letter, EPA will ask you to specify which portions of the information you consider confidential by page, paragraph and sentence. Any information not specifically identified as subject to a confidentiality claim may be disclosed to the requestor without further notice to you. For each item or class of information that you identify as being CBI, EPA will ask that you answer the following questions, giving as much detail as possible:

1. For what period of time do you request that the information be maintained as confidential, e.g., until a certain date, until the occurrence of a special event or permanently? If the occurrence of a specific event will eliminate the need for confidentiality, please specify that event.
2. Information submitted to EPA becomes stale over time. Why should the information you claim as confidential be protected for the time period specified in your answer to question number 1?
3. What measures have you taken to protect the information claimed as confidential? Have you disclosed the information to anyone other than a governmental body or someone who is bound by an agreement not to disclose the information further? If so, why should the information still be considered confidential?
4. Is the information contained in any publicly available databases, promotional publications, annual reports or articles? Is there any means by which a member of the public could obtain access to the information? Is the information of a kind that you would customarily not release to the public?
5. Has any governmental body made a determination as to confidentiality of the information? If so, please attach a copy of the determination.
6. For each category of information claimed as confidential, explain with specificity why release of the information is likely to cause substantial harm to your competitive position. Explain the specific nature of those harmful effects, why they should be viewed as

substantial and the causal relationship between disclosure and such harmful effects. How could your competitors make use of this information to your detriment?

7. Do you assert that the information is submitted on a voluntary or a mandatory basis? Please explain the reason for your assertion. If you assert that the information is voluntarily submitted information, explain whether and why disclosure of the information would tend to lessen the availability to EPA of similar information in the future.
8. Is there any other information you deem relevant to EPA's determination regarding your claim of business confidentiality?

If you receive a request for a substantiation letter from the EPA, you bear the burden of substantiating your confidentiality claim. Conclusory allegations will be given little or no weight in the determination. In substantiating your CBI claim(s), you must bracket all text so claimed and mark it "CBI." Information so designated will be disclosed by EPA only to the extent allowed by and by means of the procedures set forth in 40 C.F.R. Part 2, Subpart B. If you fail to claim the information as confidential, it may be made available to the public without further notice to you.

Personal Privacy Information

Please segregate any personnel, medical and similar files from your responses and include that information on a separate sheet(s) marked as "Personal Privacy Information." Disclosure of such information to the general public may constitute an invasion of privacy.

CERTIFICATE OF MAILING

I, Loretta Shaffer, certify that I sent a Request to Provide Information Pursuant to the Clean Air Act by Certified Mail, Return Receipt Requested, to:

Mack Sims
Duke Energy Indiana, LLC
Cayuga Generating Station
1000 East Main Street
Plainfield, Indiana 46168

7014 2870 0001 9577 8583

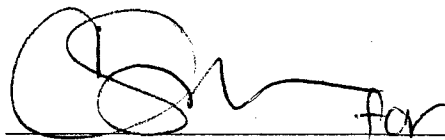
Plant Manager
Duke Energy Indiana, LLC
Cayuga Generating Station
P. O. Box 188
Cayuga, Indiana 47928

7014 2870 0001 9577 8576

I also certify that I sent a copy of the Request to Provide Information Pursuant to the Clean Air Act by E-mail to:

Phil Perry
Chief, Air Compliance Branch
PPERRY@idem.IN.gov

On the 9 day of August, 2016.



Loretta Shaffer, Program Technician
AECAB, PAS

CERTIFIED MAIL RECEIPT NUMBER: _____